# **BookletChart**

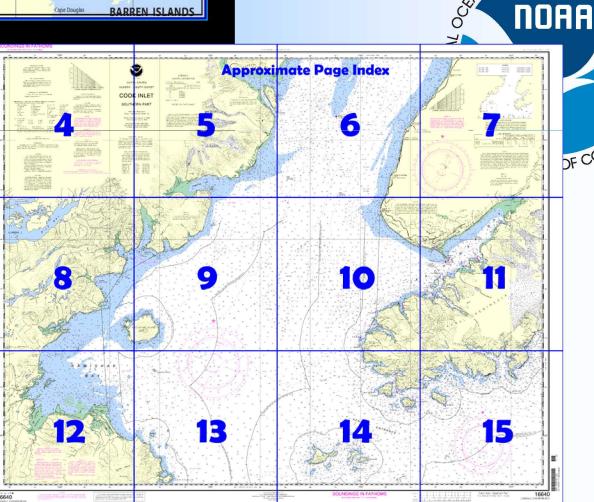
# Cook Inlet - Southern Part

(NOAA Chart 16640)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts
- Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



## What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

# What is a BookletChart<sup>™</sup>?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

# **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



# [Coast Pilot 9, Chapter 4 excerpts]

(1247) **Chinitna Bay** is shoal, and an anchorage in 4 to 5 fathoms in the entrance is exposed to all E winds. The bottom is muddy and good holding ground, and anchorage can be selected anywhere in the bay where there is sufficient depth to remain afloat at low water. There are strong williwaws with W winds. The bay is filled with ice during the winter. Tidal currents average 1 knot in Chinitna Bay.

(1248) Gull Island, 100 feet high, rocky and

grass covered, is on the S side of the entrance to Chinitna Bay. Reefs extend 0.6 mile NE and SE from the island. A deep channel, 0.3 mile wide, leads into Chinitna Bay between Gull Island and the mainland to the SW.

(1249) From Chinitna Bay to the prominent waterfall 5 miles S of Chisik Island, the coast is low and wooded, with lagoons and marshes in places, and some quicksand. Along Tuxedni Channel the coast comprises rocky bluffs and rises abruptly to high land.

(1250) An extensive shoal, with rocky, very irregular bottom, at least 3 fathoms and 3.9 miles offshore, extends 6 miles from the W shore between Chinitna Bay and Tuxedni Channel. Tide rips mark the shoal except at slack water, and are dangerous to small craft in heavy weather; the heaviest rips are near the extremity of the shoal, about 6 miles offshore. Numerous boulders, some awash, are just N of the entrance to Chinitna Bay and extend as far as 1.2 miles offshore. Small craft without local knowledge should avoid this area. Deep-draft vessels should avoid areas with depths of less than 10 fathoms.

(1251) Floating debris, including large logs, often forms long windrows parallel to shore about 4 miles off the coast in the vicinity of Chinitna Bay. Although logs are common throughout Cook Inlet, they seem to gather here more frequently than at other places.

(1252) **Red Glacier**, 7 miles N of Chinitna Bay, is a prominent landmark which derives its name from the red soil covering the seaward edge. (1253) **Iliamna Volcano** is a prominent landmark. Steam occasionally issues from fissures just below the summit and from one of the lower peaks on the SE slope.

(1254) **Chisik Island** has a narrow ridge, comparatively smooth on top, that slopes gradually upward from the SE end of the island to its NW end where it terminates in a conspicuous cliff. **Chisik Island Light** (60°05'45"N., 152°33'41"W.), 215 feet (65.6 m) above the water, is shown from a skeleton tower with a diamond-shaped red and white daymark on the S end of the island; a reef extends 0.3 mile S.

(1255) **Tuxedni Channel**, on the SW side of Chisik Island, is considered a protected anchorage.

(1256) **Snug Harbor** is generally accepted as including all the waters of Tuxedni Channel from Chisik Island Light to about 1 mile inside the entrance. These waters are quite well protected from all winds except williwaws blowing from the N end of Tuxedni Channel. The holding ground is good throughout the entire area and safe anchorage can be found on either side of the channel except when floe ice is present to varying degrees between January and May, depending on the severity and the stage of the tides when the ice leaves the lagoons and streams at breakup time.

(1257) A former cannery on the E side of Snug Harbor, on Chisik Island, has a caretaker on site. A T-head pier has about 10 feet reported alongside.

(1258) To enter Tuxedni Channel give the S end of Chisik Island a berth of over 0.5 mile, keep in midchannel until about 2 miles inside the entrance, and then follow the Chisik Island shore at a distance of 0.5 mile. The anchorage is about 3.5 miles above the light, in 13 to 14 fathoms, mud and sand bottom, and has a clear width of 0.7 mile. On the island side, the shore is bold but a shoal makes out 0.6 to 1 mile from the main shore abreast the anchorage; the shoaling is abrupt on the sides of the channel and there are boulders in places on the shoals. Heavy williwaws occur with gales from any direction, and raise a choppy sea dangerous to open boats. The channel is occasionally blocked with ice from January to March.

Tides and currents

(1259) The diurnal range of tide is 16.6 feet in Tuxedni Channel. The current floods NW at a velocity of 1.1 knots and ebbs SSE at a velocity of 1.9 knots.

(1260) **Tuxedni Bay** consists largely of shoals and reefs. A narrow channel extends from Tuxedni Channel nearly to the head of the bay. This channel shoals rapidly after leaving Chisik Island. The passage N of Chisik Island should be avoided, even by small craft.

(1261) In 1978, the NOAA Ship FAIRWEATHER reported the shifting of rocks and the possibility of uncharted rocks in Tuxedni Bay W of longitude 152°40'W. Caution is advised in this area.

# **Table of Selected Chart Notes**

#### HEIGHTS

Heights in feet above Mean High Water.

#### NOTE E

This entire foreshore as far as Sea Otter Point is foul with rocks. New rocks are continually falling from the slopes.

Mercator Projection Scale 1:200,000 at Lat 60° 00'

North American Datum of 1983 (World Geodetic System 1984)

SOUNDINGS IN FATHOMS THOMS AND FEET TO ELEVEN FATHOMS) AT MEAN LOWER LOW WATER



#### CALITION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

$\rightarrow \rightarrow \rightarrow \rightarrow$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Pipeline Area	Cable Area		

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, draggling, or trawling. Covered wells may be marked by lighted or unlighted buovs.

#### AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

## SLIPPI EMENTAL INFORMATION

Consult U.S. Coast Pilot 9 for important supplemental information.

#### POLLUTION REPORTS

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility it felephone communication is impossible (33 CFR 153).

# NOTE D

# CAUTION

Cook Inlet, Eastern Portion

Numerous uncharted and dangerous submerged boulders exist in the eastern portion of Cook Inlet. Mariners should use extreme caution in this area.

# NOTE A

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilat 9. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

#### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

The bouys in Cook Inlet are seasonally

maintained from May 1 to Nov. 1. For details see U. S. Coast Guard Light List.

#### BADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

## LOCAL MAGNETIC DISTURBANCE

Differences of as much as 3° from the normal variation have been observed in Iniskin Bay and Iliamna Bay.

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

#### CAUTION

Only marine radiobeacons have been cali-brated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Account Publication 117.

Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

#### NOAA WEATHER RADIO BROADCASTS

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at blies belowiches. high elevations.

Raspberry I, AK	KZZ-90	162.425 MHz
Bede Mt, AK	WNG-528	162.450 MHz
Pillar Mt, AK	WNG-531	162.525 MHz
Rugged I, AK	WNG-526	162.425 MHz
Ninilchik, AK	KZZ-97	162.550 MHz
Homer, AK	WXJ-24	162.40 MHz
Soldotna, AK	WWG-39	162.475 MHz

#### NOTE B

Mariners are encouraged to use extreme CAUTION when approaching Kachemak Bay on a south or central course due to extreme heavy concentration of fixed crab fishing gear and fishing vessels. Vessel transits to and from Homer not more than two miles seaward from the 10 fathom curve from Anchor Point to Bluff Point should clear the fixed gear.

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 2.300" southward and 7.700" westward to agree with this chort.

## LORAN-C GENERAL EXPLANATION

LORAN-C FREQUENCY PULSE REPETITION INTERVAL	100kHz
796079,600	Microseconds
999099,900	) Microseconds
STATION TYPE DESIGNATORS: (No	t individual station
letter designators).	
M Master	

EXAMPLE: 7960-X

## RATES ON THIS CHART

Loran-C correction tables published by the National Imagery and Mapping Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propa-gation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

#### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charling. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

#### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

#### CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the

COLREGS, 80.1705 (see note A) International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

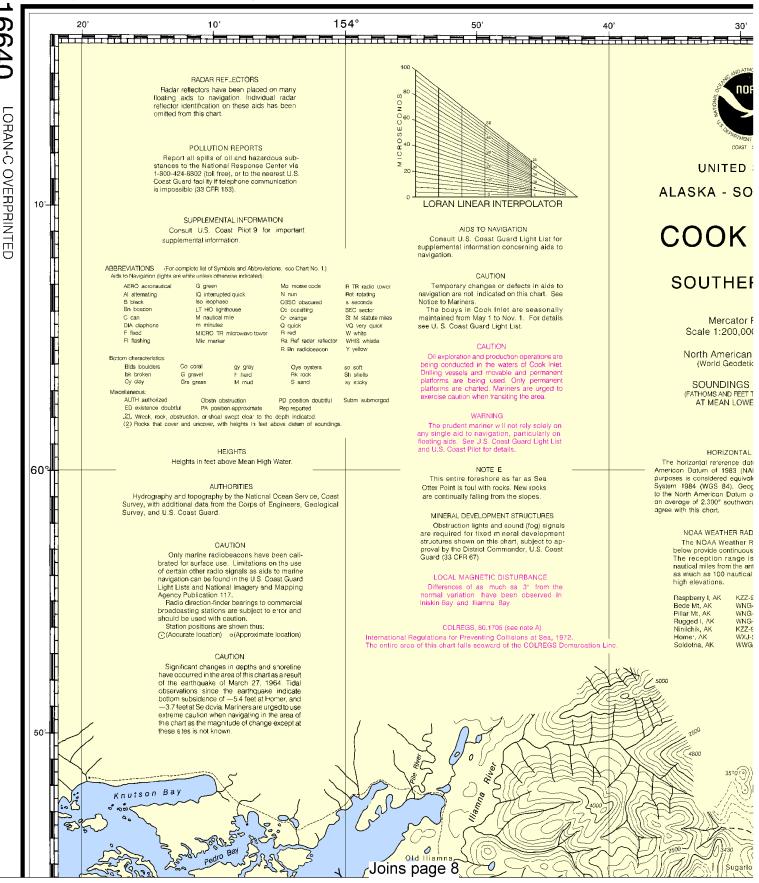
This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.) Aids to Navigation (lights are white unless otherwise indicated): R TR radio tower Rot rotating s seconds SEC sector St M statute miles AERO aeronautical G green AERO aeronau Al alternating B black Bn beacon C can DIA diaphone F fixed Fi flashing G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Micr marker N nun
OBSC obscured
Oc occulting
Or orange VQ very quick W white WHIS whistle Mkr marker R Bn radiobeacon Y yellow Bottom characteristics: Blds boulders bk broken Cy clay Oys oysters Rk rock S sand so soft Sh shells G gravel Grs grass h hard M mud sy sticky AUTH authorized ED existence doubtful Obstn obstruction PA position approximate Rep reported .21. Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

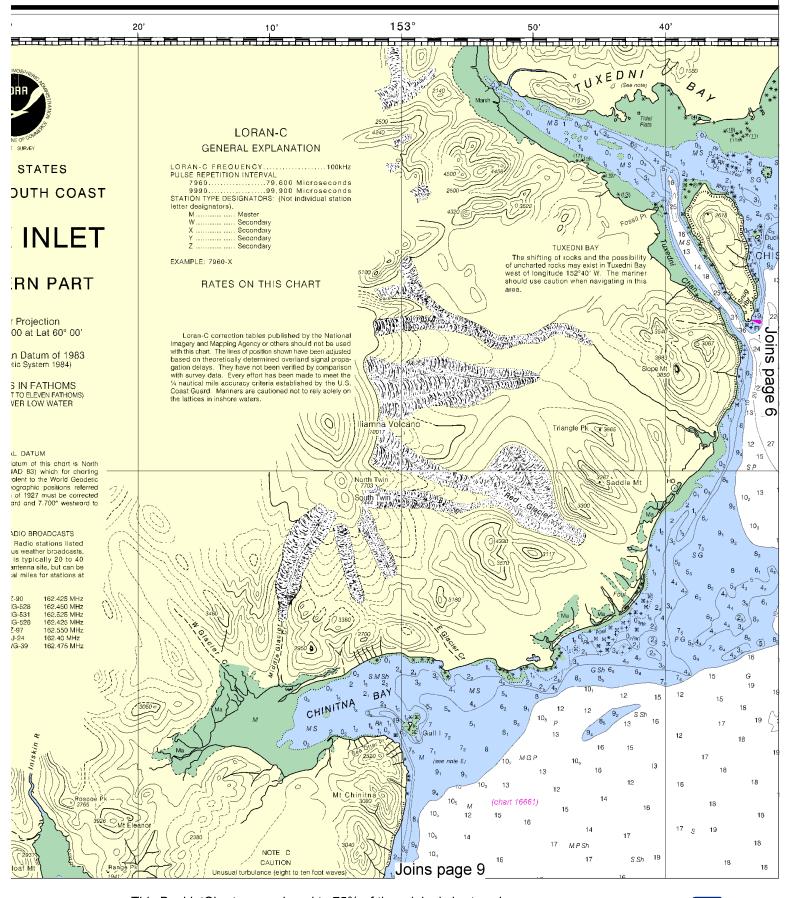
TIDAL INFORMATION									
	Place	Height referred to datum of soundings (MLLW)							
	Name	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water			
	Ninilchik Seldovia Nordyke I., Kamishak Bay	(60°03′N/151°40′W) (59°27′N/151°43′W) (59°11′N/154°05′W)	feet  9.1  8.0  5.2	feet 18.4 17.2 14.4	feet  .7  .7  .5	feet -6.0 -7.0 -5.0			
	(101)				_				

# SOUNDINGS IN FATHOMS

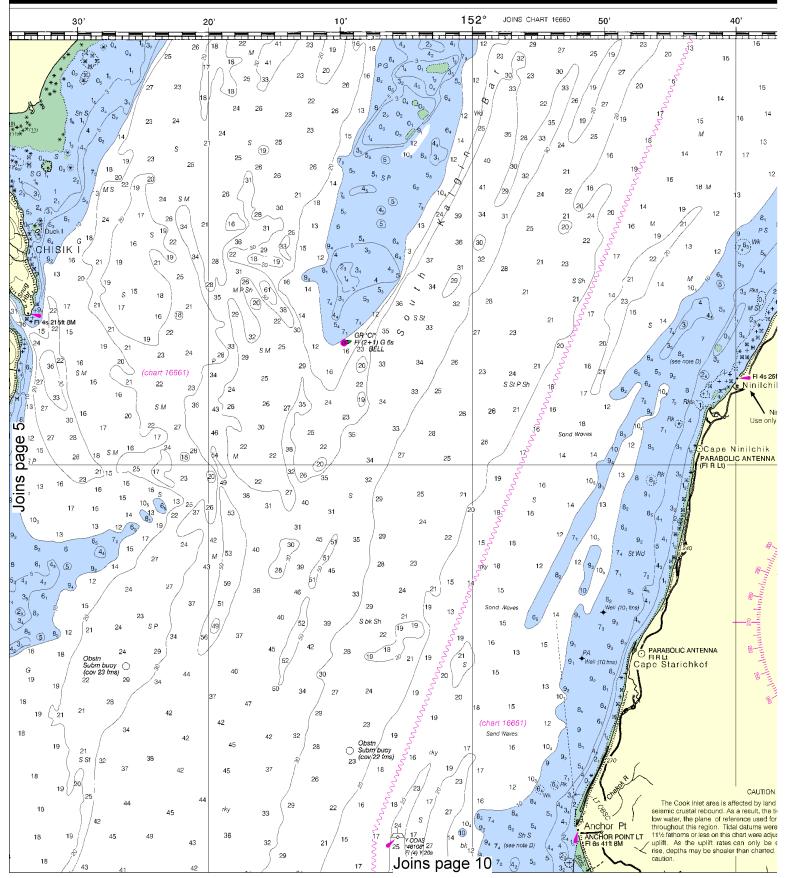
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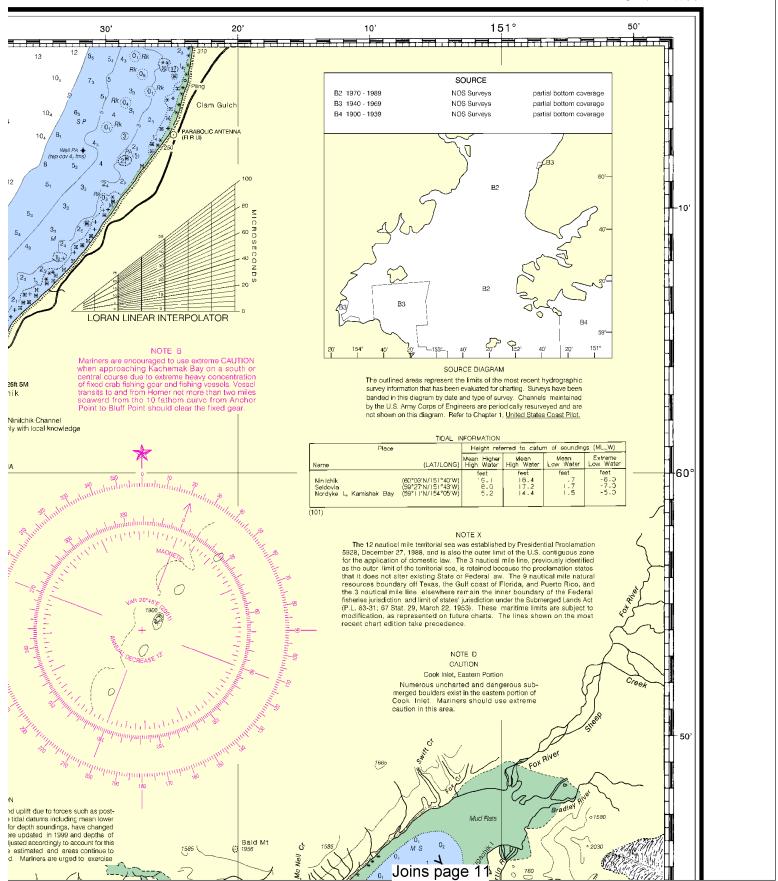


This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:266667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.





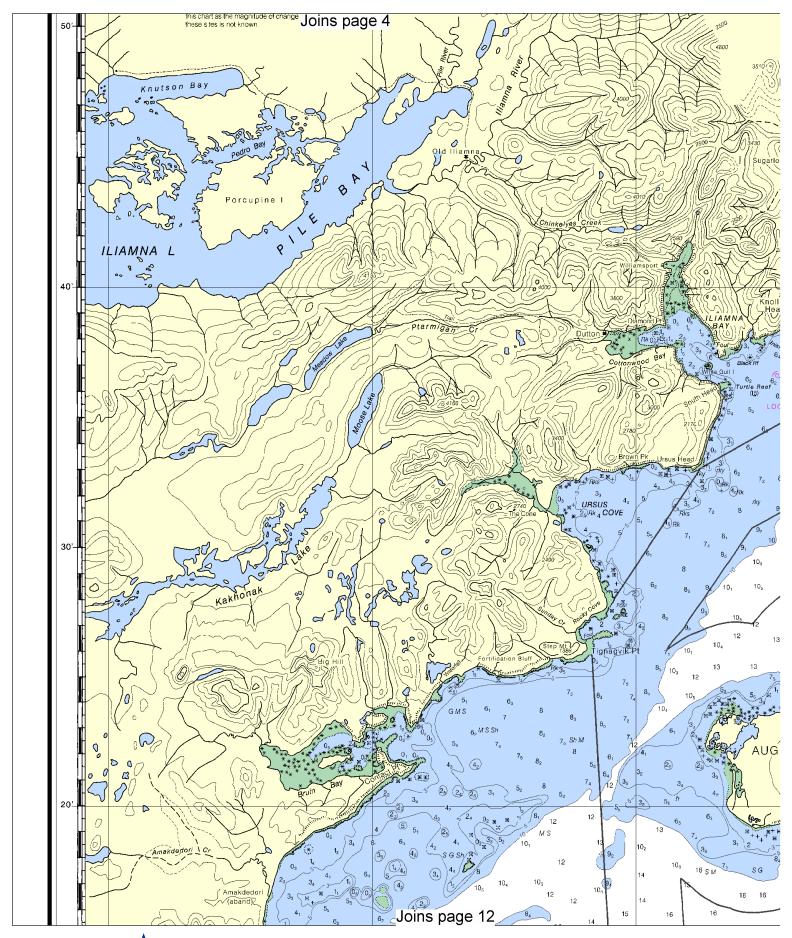




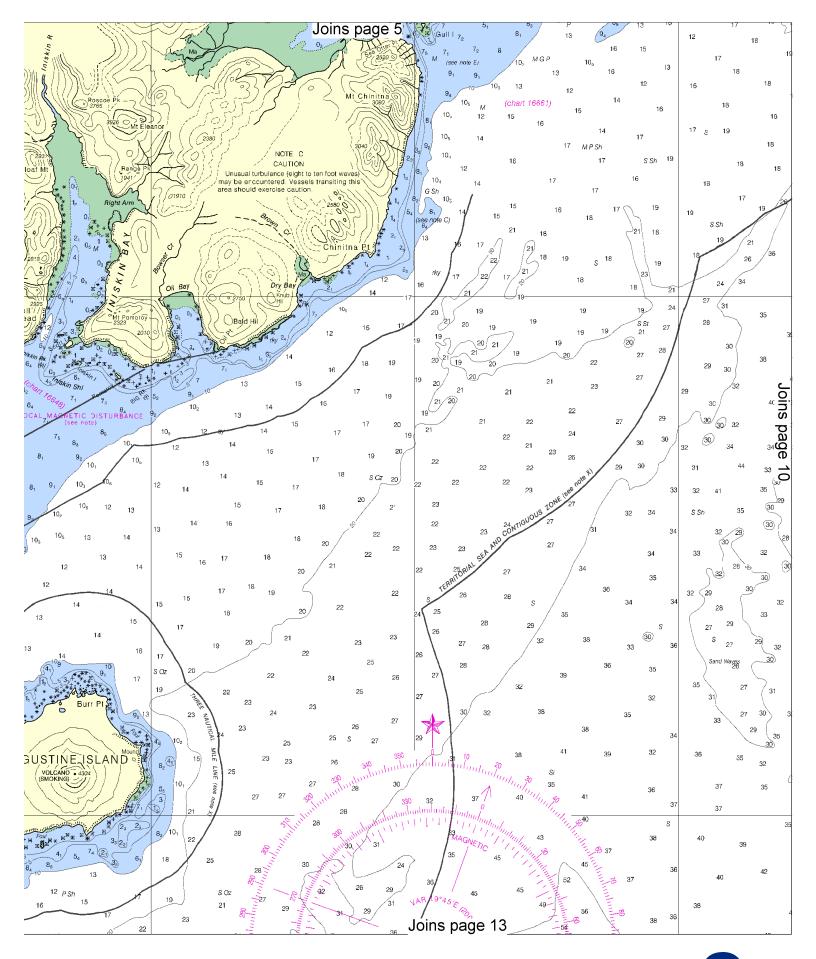
This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,

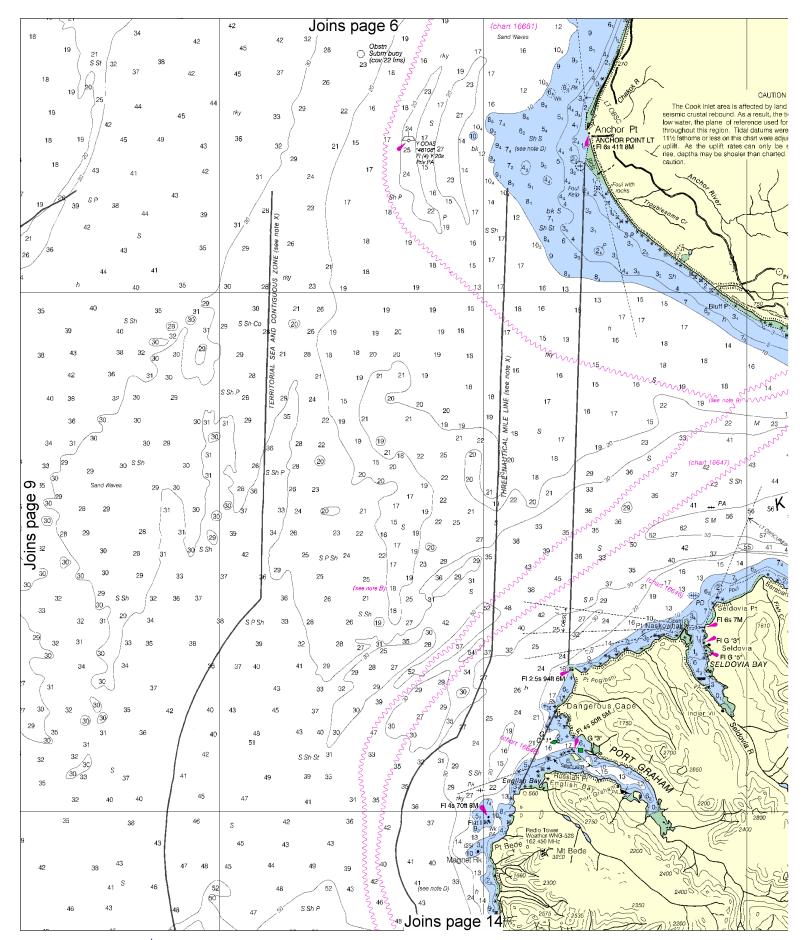
NGA Weekly Notice to Mariners: 0910 2/27/2010,

Canadian Coast Guard Notice to Mariners: 0909 9/25/2009.



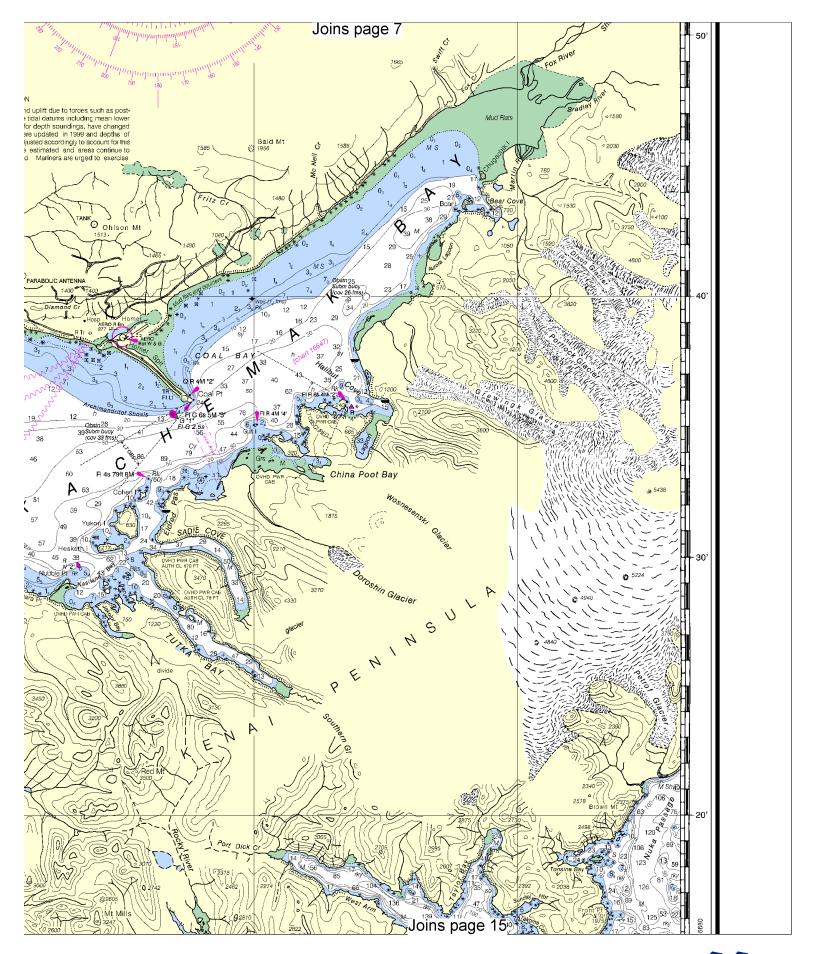


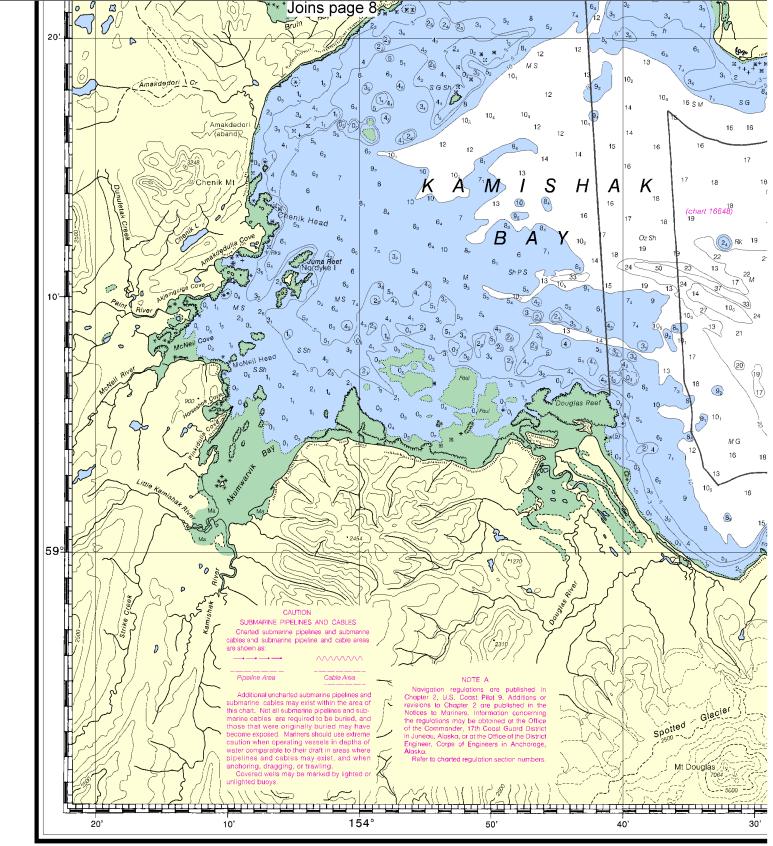












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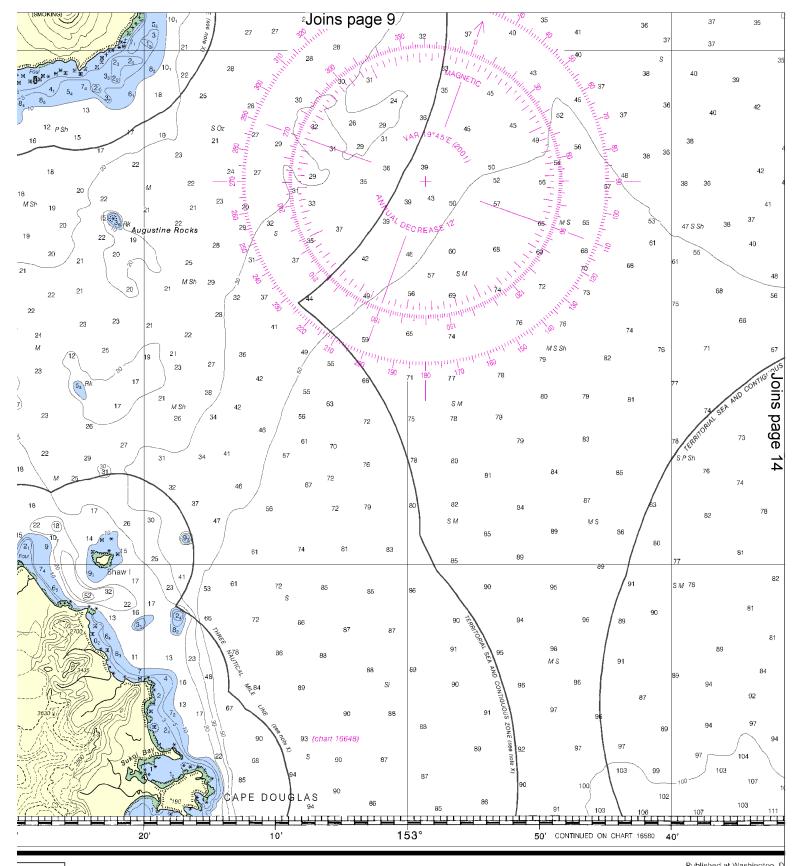
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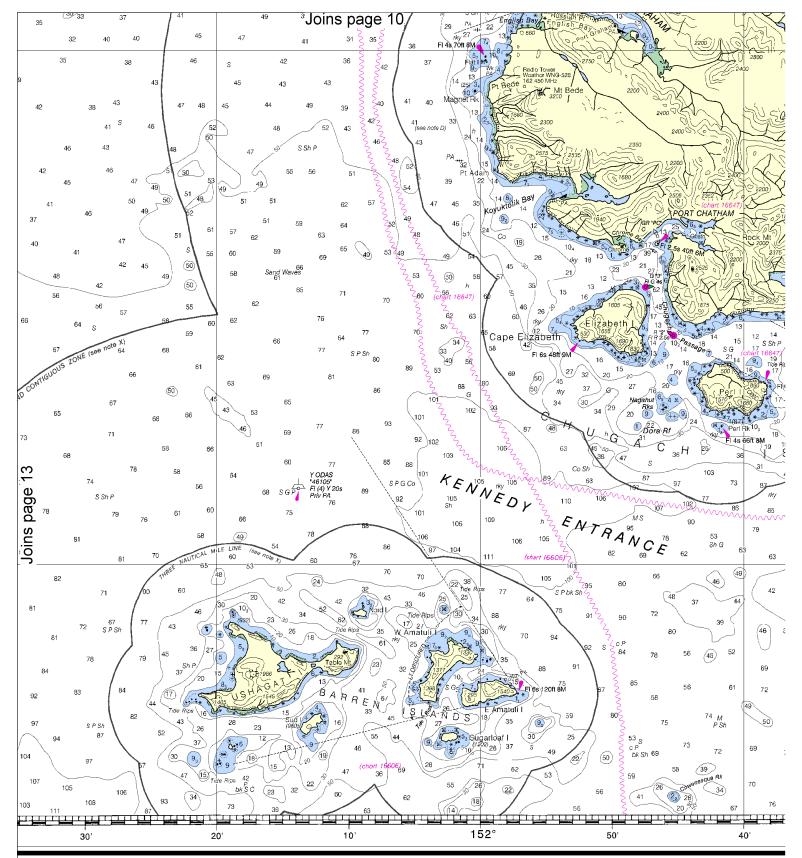
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The National omments for tional Ocean U.S. DEPARTMENT OF COMI NATIONAL OCEANIC AND ATMOSPHERIC NATIONAL OCEAN SERVIC COAST SURVEY



Vashington, D.C.
NT OF COMMERCE
MOSPHERIC ADMINISTRATION
CEAN SERVICE
SUBJEY

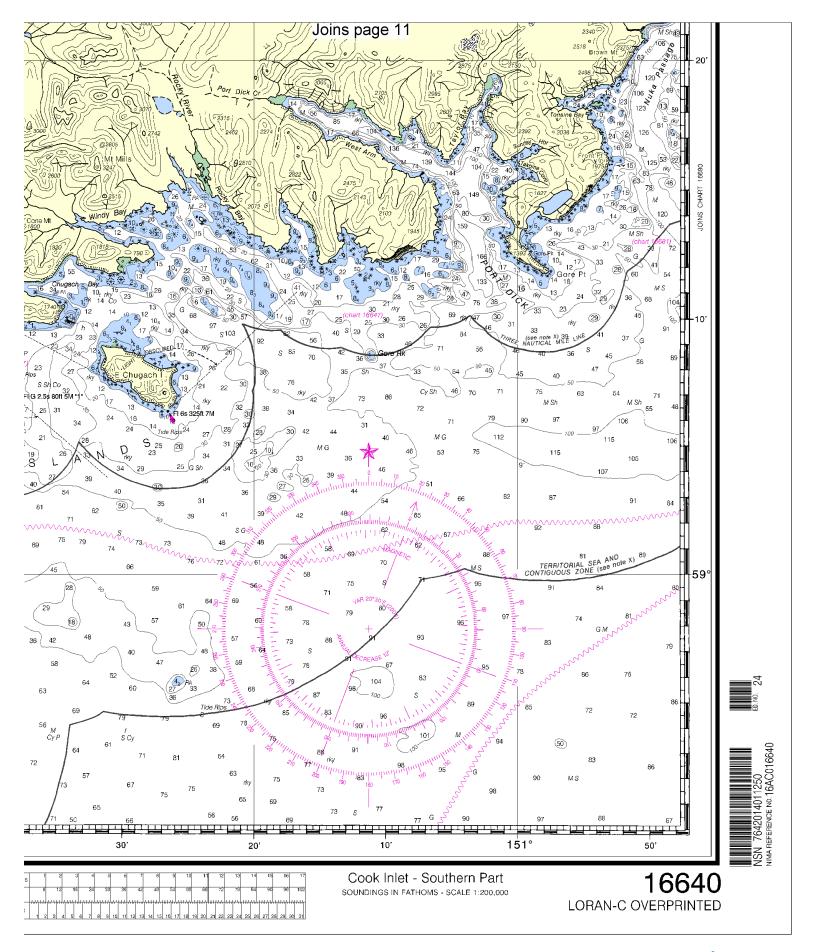
# **SOUNDINGS IN FATHOMS**

(FATHOMS AND FEET TO 11 FATHOMS)

FATHOMS FEET METERS







# **EMERGENCY INFORMATION**

# VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

# Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

## **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

# HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

Coast Guard Search & Rescue (Pacific Coord) – 510-437-3700

Coast Guard Search & Rescue (RCC Juneau) – 907-463-2000

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



# NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

# Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

# Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="